

Supporting Information

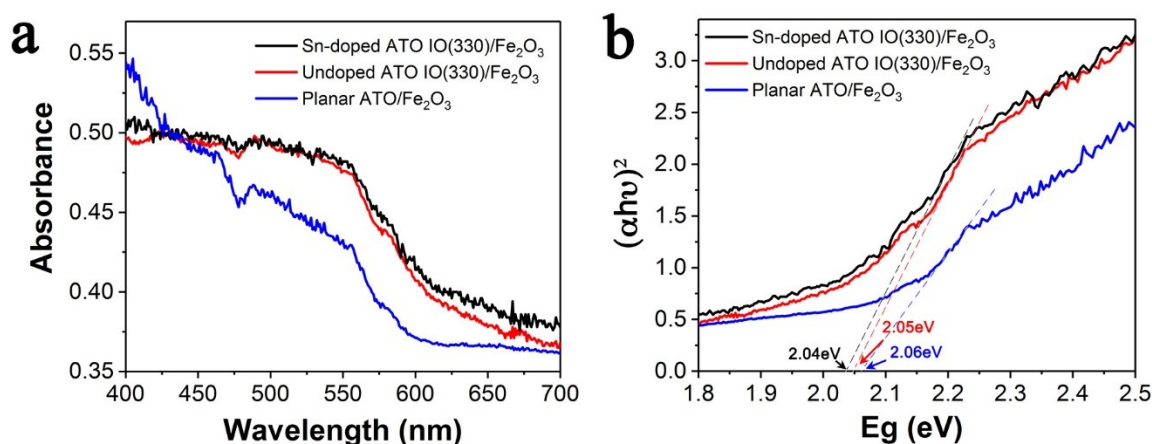
Sn-doped 3D ATO Inverse Opal/Hematite Hierarchical Structures: Facile Fabrication and Efficient Photoelectrochemical performance

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FigS1. (a) Diffuse reflectance UV-Vis absorption and (b) Tauc-Plots of Sn-doped and undoped ATO IO(330)/Fe₂O₃ sample and planar control sample.

Table S1 Comparison of PEC performances of reported Fe₂O₃ based nanostructured photoanodes

Fe ₂ O ₃ based nanostructured photoanodes	Preparation of Fe ₂ O ₃	J _{1.23} [mA/cm ²] ^{a)}	Ref.
Sn-doped Fe ₂ O ₃ Nanowires	hydrothermal	0.45	1
Sn-doped Fe ₂ O ₃ films	nonpolar organic solution process approach	1.05	2
Sn-doped Fe ₂ O ₃ nanorod arrays	hydrothermal	1.00	3
3D FTO IO @ Fe ₂ O ₃	hydrothermal	0.46	4
Fe ₂ O ₃ /graphene IO	Chemical bath deposition	1.62 mA/cm ² at 1.5V vs. RHE	5
Fe ₂ O ₃ /ITO IO	ALD	1.60 mA/cm ² at 1.53 V vs. RHE	6
3D ATO/ Fe ₂ O ₃ nanorods	hydrothermal	1.10	7

a): Unless otherwise specified, the photocurrent density is collected at 1.23V vs. RHE with AM 1.5G illumination(100 mW/cm²) in 1M NaOH.

Reference

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